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Moving Toward Quality

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ONLINE DATABASES

BY CAROL TENOPIR

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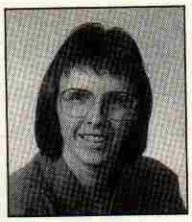
IN THE 1976 movie *Network*, disgruntled television viewers shouted from their windows "I'm mad as hell, and I'm not going to take it anymore!" An isolated voice crying out may have had no effect, but when thousands shouted together, network executives had to take notice.

Database searchers disgusted with the quality of the information they retrieve have been crying with isolated voices for nearly a decade now. Although nearly every online system and many database producers claim quality control procedures, searchers bemoan too many typos, factual mistakes, missing information, and other quality lapses. Some of these isolated voices are quite articulate, such as Anne Mintz, librarian at Forbes, who won the 1991 UMI/Data Courier Excellence in Writing Award for her "Quality Control and the Zen of Database Production" (*Online*, Nov. 1990).

Spurred on by such articulate voices, a growing international consumer movement toward data quality is gathering momentum. The cry of "We're not going to take it anymore" is at last beginning to bear fruit. Searchers are banding together, with some concerned database producers and online systems joining in. Some of the searchers' efforts have been reported here (see Online Databases, *LJ*, March 1, 1991, p. 73–74 and October 1, 1990, p. 64ff.). Searchers in Barbara Quint's Southern California Online Users' Group (SCOUG) and the Finnish Society for Information Services have been particularly vociferous.

FIXIT

In her award-winning article, Mintz called for online systems to add a command called FIXIT, which would allow users who detect errors to easily notify the online system, which would then take the responsibility of getting it fixed. FIXIT would be easy to use; responses from the vendors would be fast; questions and solutions would be visible to all users; and it would all be done at no cost to the user. In February 1992 NewsNet, an online system that provides access to full texts of hundreds of newsletters, became the first online system to implement FIXIT.



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NewsNet's FIXIT allows searchers to report any type of error directly and immediately to NewsNet's Customer Service Department. The error can be one of database content, such as typographical errors in a record, or it can be complaints about malfunctioning search software features, poor help features, lags in response time—anything. NewsNet promises to fix it quickly, no matter who is responsible—itself or the database producer.

An important element of FIXIT is that searchers don't have to pay for the courtesy of helping improve quality. NewsNet not only automatically deducts FIXIT time from the customer's bill but also analyzes the error to see if a credit should be issued for the original search that revealed the error.

FIXIT is an extension of NewsNet's E-mail function and thus was not technically difficult to implement. The difficult part is following through—answering searchers within a day and making sure all kinds of errors are permanently fixed in a timely manner.

Andrew Elston, NewsNet president, says FIXIT was possible for the company because all files loaded on NewsNet first go through an error-checking procedure, something many other vendors do not do. Still, he admitted, "I was terrified that we would be inundated" with fixes. In reality, "the experience has been minor, only about 12 FIXIT requests a week."

Most are "minor, routine questions such as when is a file going to be loaded," although reports of more serious problems are received. For example, several users have discovered words in a database index that point to the wrong records, causing inexplicable false drops. Elston says NewsNet "can fix this in a few minutes if we know it's there." He admonishes users "don't keep quiet—tell us!" Almost all fixes are taken care of within a day. Elston can't say for sure why the number of FIXITs has been so low. Because the NewsNet FIXIT command asks for verification of a user's name and account number, some people enter FIXIT and back out before they complete their complaint or question. Of the people who do use FIXIT, over half are from outside the United States, for whom the toll free 800 number is not available.

FIXIT messages go directly to NewsNet's staff, and solutions are relayed to the user who posted the problem. It is not a bulletin board—other searchers cannot read the original messages or the fixes. This is one way that NewsNet's command varies from the ideal proposed by Mintz. Elston feels that an online vendor is "an intermediary between the database producer and the user." By fixing problems quietly, they protect the producers.

NewsNet's decision to act quickly on implementing FIXIT has certainly paid off in public relations. In 1992, FIXIT was recognized at the Online '92 Meeting in November and the London International Online Meeting in December, when it won both the Online Magazine Product of the Year Award and the European Product-of-the-Year Award. Although several online services claim they are working on FIXIT, so far NewsNet's is the only one that is operational.

Data-Star bulletin board

Data-Star is the second system to respond to searchers' requests to be partners in quality control. At the March 1993 meeting of the Finnish Society for Information Services, Data-Star announced the opening of a DataMail bulletin board called "Databases." (This announcement was made *after* Knight-Ridder's acquisition of Data-Star so presumably that will not change things.) "Databases," publicly available as of April 15, 1993, is for database searchers and producers.

Producers can post messages about database enhancements, training sessions, or new products. Search-

ers can post file or system questions to Data-Star or to any database producer. Searchers also can comment on quality issues and request fixes of database errors. Producers are urged to monitor the bulletin board regularly, but it will be Data-Star's responsibility to pass messages on if they do not.

Mary Dee Ojala, an information consultant in the United States, was instrumental in getting the bulletin board started. She says she hopes it will "be a place to raise problems, issues, and even good things." "Anything *specific* about databases" can be posted by users or producers. "It's a way for producers to let searchers know what's going on" and for searchers to inform producers of specific problems in their databases.

One of the first questions posted was by a searcher who wanted to know how databases were going to handle the impending change in German postal codes from four to five digits. Dun & Bradstreet answered the searcher on the board the next day, explaining that its files will be reloaded on Data-Star with the new codes the day after the change takes place. Reuters has announced new country codes (for new countries) on the bulletin board long before a printed announcement will reach users. Unfortunately, the Data-Star bulletin board is not free. Users pay regular DataMail rates to access it.

TQM

Total Quality Management (TQM) is a popular buzzword in business circles and is beginning to attract the interest of some database producers. TQM emphasizes quality in all aspects of a company and at all stages of the product development process. It focuses on the customers by advocating the creation of products that meet customers' expectations of quality. Creating top-quality products requires quality measures at every step of the process—from data collection to retrieval—by every member of a TQM organization.

Top management must make the quality commitment, but the total organization is responsible for making quality products. All employees at various stages of the production cycle take responsibility for quality. Phrases like "meeting (or exceeding) customer expectation," "continuous improvement," "zero defects," and "delighting the client" pop up regularly in TQM literature.

TQM is becoming more common in internal database production, with quality consultants and software packages that help ensure defect-free databases. It is also being advocated by U.S. government departments, including some that produce publicly available databases. The National Technical Information Service (NTIS), for example, is embracing TQM (and advertising the fact).

One database producer that has made a long-term significant commitment to TQM is Infomat Limited. This Finnish-owned, British database producer has been working for four years on implementing a full TQM program. Infomat began its TQM movement while a subsidiary of Predicasts (1988–92). In December 1992, Infomat was acquired by Finnish-based Esmerk.

Admittedly, Infomat is not a typical one-size-fits-all database producer. It creates customized competitor tracking/market monitoring information products for large corporate clients. Still, its TQM ideal could be applied by more typical database producers and by information brokers as well.

Infomat credits its quality program with decreasing staff turnover, improving staff attitudes, and increasing customer satisfaction. An Infomat spokesperson said, "due to TQM, Infomat's employees understand what the final customer wants. Infomat is a more cohesive company with the 'them and us' attitude between production and nonproduction virtually vanished. The empowerment of individuals to take control over their environment has also alleviated stress . . . ."

ISO 9000

With a continuing TQM commitment, Infomat's 1993 goal is to achieve quality certification from the International Standards Organization (ISO). ISO has stringent quality standards laid out in the ISO 9000 series of standards, which provide guidelines for how to develop a quality program within a company.

Once a company sets up a program to meet the guidelines, it can request a visit from independent auditors who will review the company's quality program for possible certification. Not only will customers have more confidence in a certified company, certain contracting agencies will now do business only with ISO-certified companies.

Basch's book on quality

Reva Basch, who has written a fair amount about database quality herself, is currently editing a book on the topic. *Quality and Value in Information Services* will be published by Ashgate Publishing Limited (Gower) in late 1993 or early 1994.

According to Basch, the book "will present a variety of perspectives on quality issues as they apply to the production, dissemination, and use" of electronic information products. It will address such provocative issues as "How does one judge the reliability, accuracy, and completeness of an information source? What measures do publishers and distributors employ to ensure that quality standards are met? Can quality be 'designed-in' to information products as it can into more tangible commodities? What parts of the process are the responsibility of the original publisher, the database producer, the online system, the ultimate user? What are the consequences of breakdowns in the quality assurance process? Where does the liability chain lead?"

Contributors include well-known authors from a variety of backgrounds. Chapter authors likely to be familiar to many librarians include Barbara Quint, Anne Mintz, Sophie Hudnut of Dialog, and this columnist.

Who is responsible?

Who is responsible for quality in electronic databases? Sometimes no one admits responsibility. Database producers publish increasingly complex disclaimers and claim vendors won't let them make changes in a timely manner; online vendors point the finger at database producers; searchers blame both.

In reality, we all share responsibility. Database producers are ultimately responsible for the quality or lack thereof in the content of their products. Online vendors are responsible for helping users identify and report errors. If their correction procedures are so awkward or expensive that they make it difficult for database producers to correct content errors, they are responsible for perpetuating the problem.

Finally, searchers are responsible as well. We are responsible if we continue to pay for poor quality information, if we do not let database producers and online vendors know what we need, and if we do not join together in the quality movement.